

CROSS-RELATED APPLICATIONS

B1

This application is a Continuation application of U.S. Patent Application Serial No. 09/595,139, filed June 15, 2000, which is a Continuation application of U.S. Patent Application Serial No. 09/441,338, filed November 16, 1999, which is now U.S. Patent No. 6,141,419, issued October 31, 2000.

Please replace the paragraph beginning at page 2, line 20:

B2

One aspect of the invention is an optical disk on which data is recorded with CLV, wherein, in a prescribed region of a pre-pit signal area on said disk, all or part of a barcode is written in overwriting fashion by selectively removing a reflective film in said prescribed region.

Please replace the paragraph beginning at page 3, line 1:

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Another aspect of the invention is an optical disk, wherein a control data area is provided for holding therein physical feature information concerning said optical disk, and an identifier for indicating the presence or absence of said barcode is recorded in said control data area.

Please replace the paragraph beginning at page 3, line 6:

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Still another aspect of the invention is an optical disk, wherein a guard-band area where no data is recorded is provided between said control data area and said prescribed region of said pre-pit signal area.

Please replace the paragraph beginning at page 3, line 10:

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Yet another aspect of the invention is an optical disk, wherein said barcode is formed in such a manner that two or more barcode signals cannot occur within one prescribed time slot.

Please replace the paragraph beginning at page 3, line 13:

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Still yet another aspect of the invention is an optical disk, wherein said barcode contains data at least including ID information uniquely given to said optical disk.

Please replace the paragraph beginning a page 3, line 16:

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B7 - A further aspect of the invention is an optical disk, wherein said barcode contains data including, in addition to said ID information, a public key of a public key encryption function corresponding to said ID information, said public key being used when encrypting prescribed data for transmission to an external party in order to obtain from said external party a password required to reproduce said optical disk.

[ Please replace the paragraph beginning at page 3, line 24:

B8 - A still further aspect of the invention is an optical disk, wherein said ID information is encrypted or applied a digital signature to.

[ Please replace the paragraph beginning at page 4, line 2:

B9 - A yet further aspect of the invention is an optical disk, wherein a secret key of a public key encryption function is used when applying encryption or a digital signature to said ID information.

[ Please replace the paragraph beginning at page 4, line 6:

B10 - A still yet further aspect of the invention is an optical disk, wherein said optical disk is constructed from two disk-substrates laminated together.

[ Please replace the paragraph beginning at page 4, line 9

B11 - One aspect of the invention is an optical disk barcode forming method wherein pulsed laser light from a light source is made into a rectangular beam pattern by using a rectangular mask and said rectangular beam pattern is focused on a reflective film in a pre-pit signal region in a prescribed radius portion of an optical disk on which data is recorded, and at the same time, said optical disk is rotated, thereby forming a plurality of rectangular reflective-film-removed regions as a barcode in the same radius portion on said reflective film.

[ Please replace the paragraph beginning at page 4, line 18:

B12 - Another aspect of the invention is an optical disk barcode forming method, wherein said optical disk includes a control data area for holding therein physical feature information concerning said optical disk, and an identifier for indicating the presence or absence of said barcode is recorded in said control data area.

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[ Please replace the paragraph beginning at page 4, line 24:

B13 Still another aspect of the invention is an optical disk barcode forming method, wherein said barcode is formed in such a manner that two or more barcode signals cannot occur within one prescribed time slot.

[ Please replace the paragraph beginning at page 5, line 3:

B14 Yet another aspect of the invention is an optical disk barcode forming method, wherein said optical disk is constructed from two disk-substrates laminated together.

[ Please replace the paragraph beginning at page 5, line 6:

B15 Still yet another aspect of the invention is an optical disk reproduction apparatus wherein recorded contents of a main data recording area, recorded by forming pits on an optical disk, are reproduced by using a rotational phase control for a motor, while recorded contents of a different recording area than said main data recording area, recorded by selectively forming low-reflectivity portions on a reflective film in said different recording area, are reproduced by using rotational speed control for said motor, and

[ Please replace the paragraph beginning at page 5, line 17:

B16 A further aspect of the invention is an optical disk reproduction apparatus, wherein tracking control is not performed in said different recording area.

[ Please replace the paragraph beginning at page 5, line 20:

B17 A still further aspect of the invention is an optical disk reproduction apparatus, wherein tracking control is, in effect, performed in said different recording area.

[ Please replace the paragraph beginning at page 5, line 23:

B18 A yet further aspect of the invention is an optical disk reproduction apparatus, wherein a rotational speed is the rotational speed that would be achieved in said different recording area is said rotational phase control were applied.

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[ Please replace the paragraph beginning at page 6, line 2:

B19 A still further aspect of the invention is an optical disk reproduction apparatus, wherein the rotational speed of said motor in aid rotational speed control is maintained at a prescribed value based on a result obtained by measuring a minimum-length pit in said different recording area.

[ Please replace the paragraph beginning at page 6, line 7:

B20 A yet further aspect of the invention is an optical disk reproduction apparatus, wherein said low-reflectivity portions are a barcode formed by selectively removing said reflective film.

[ Please replace the section beginning at page 6, line 11:

B21 A still yet further aspect of the invention is an optical disk reproduction apparatus wherein

[ Please replace the section beginning at page 6, line 19:

B22 One aspect of the invention is an optical disk reproduction apparatus, wherein

[ Please replace the paragraph beginning at page 7, line 1:

B23 Another aspect of the invention is an optical disk reproduction apparatus, wherein said optical disk is constructed from two disk-substrates laminated together.

[ Please replace the paragraph beginning at page 7, line 4:

B24 Still another aspect of the invention is an optical disk reproduction apparatus, wherein said optical disk includes a control data area for holding therein physical feature information concerning said optical disk, and an identifier for indicating the presence or absence of said barcode is recorded in said control data area.

[ Please replace the paragraph beginning at page 7, line 10:

B25  
cm. 1 Yet another aspect of the invention is an optical disk reproduction apparatus, wherein, after reading recorded contents of said control data area and judging the presence or absence of said

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canceled. barcode, it is determined whether an optical pickup should be moved to an inner portion or an outer portion of said optical disk.

[ Please replace the section beginning at page 7, line 16:

B26 Still yet another aspect of the invention is a marking forming apparatus which comprises:

[ Please replace the paragraph beginning at page 8, line 6:

B27 A further aspect of the invention is a marking forming apparatus, wherein said disk is constructed from two disk-substrates laminated together.

[ Please replace the paragraph beginning at page 8, line 9:

B28 A still further aspect of the invention is a marking forming means, wherein said position information writing means includes encrypting means for encrypting at least said detected position information or information concerning said position information, and writes contents thus encrypted to said disk.

[ Please replace the paragraph beginning at page 8, line 15:

B29 A yet further aspect of the invention is a marking forming apparatus, wherein said position information writing means includes digital signature means for applying a digital signature to at least said detected position information or information concerning said position information.

[ Please replace the section beginning at page 8, line 24:

B30 A still yet further aspect of the invention is a reproduction apparatus which comprises:

[ Please replace the paragraph beginning at page 9, line 20:

B31 One aspect of the invention is a reproduction apparatus according, wherein at least said detected position information or information concerning said position information is written to said disk by position information writing means.

[ Please replace the section beginning at page 9, line 24:

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Another aspect of the invention is a reproduction apparatus, wherein

Please replace the section beginning at page 10, line 9:

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Still another aspect of the invention is a reproduction apparatus, wherein:

Please replace the section beginning at page 11, line 8:

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Yet another aspect of the invention is a method of manufacturing a disk, which comprises the steps of:

Please replace the section beginning at page 11, line 23:

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Still yet another aspect of the invention is a method of manufacturing a disk, which comprises the steps of:

Please replace the paragraph beginning at page 12, line 13:

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A further aspect of the invention is a disk wherein a marking is formed by a laser to reflective film of said disk holding data written thereon, at least position information of said marking or information concerning said position information is encrypted or applied a digital signature, at least said encrypted information or digital signature-appended information is converted into a barcode, and said barcode is written by selectively removing said reflective film on said disk on which data is recorded with CLV, all or part of said barcode being written in overwriting fashion to a prescribed region of a pre-pit signal area on said disk.

IN THE CLAIMS:

Please cancel claims 1-35.

Please add the following new claims:

36. (Newly Added) An optical disk, comprising:

a barcode like mark;

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